

TITLE: Positioning Structure of a Beach Umbrella

## BACKGROUND OF THE INVENTION

A conventional beach umbrella usually includes a shaft and a frame set, wherein the shaft is composed of an upper tube and a lower tube to  
5 insert into sand or earth for standing and being used. Since the beach umbrella is used at beach, where the wind is always strong, it should be positioned on ground for resisting the wind. But it is very difficult to insert the shaft of the umbrella into the ground in stable. Moreover, the shaft includes the upper tube and the lower tube, both of which are  
10 connected together by compression that will be easily loosened when strong wind blows.

The present invention is to provide a positioning structure of a beach umbrella, which includes a positioning apparatus to engage with the upper tube and the lower tube of the shaft firmly. And the umbrella  
15 can be positioned at beach in ease by use of the positioning apparatus that overcomes the drawback of prior arts. Now, accompanying with the following drawings, the character of the present invention will be described here and after.

## 20 BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view showing a positioning apparatus and a shaft of a beach umbrella according to the present invention.

Figure 2 is a perspective view showing the positioning apparatus being assembled with the shaft of the umbrella according to the present  
25 invention.

Figure 3 is a cross-sectional plan view showing the positioning

apparatus being assembled with lower tube of the shaft.

Figure 4 is an assembled plan view of Figure 3.

Figure 5 to 7 are plan views showing positioning procedures of the beach umbrella according to the present invention.

5        Figure 8 is a plan view showing a true embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figure 1 to 4, the present invention relates to a beach  
10    umbrella, which has a shaft including an upper tube (2) and a lower tube (3), both with several interval positioned aperture (21), (31) thereon. A positioning apparatus (1) is provided to connect the two tubes together, which has a flat plate (11), a joint (16) with a spring (15) on one side to connect with a handle (13) and to provide elastic force for pushing a rod  
15    (14) on top of the handle (13) into central hole (12) of the apparatus (1). As the upper tube (2) and the lower tube (3) are received in the central hole (12) of the positioning apparatus (1), the rod (14) can penetrate one aperture (21) and a relating aperture (31) to position both tubes at the certain position. Hence, the height of the beach umbrella can be  
20    determined in secure, wherein both tubes (2), (3) are never loosened.

When to insert the lower tube (3) into ground of beach, sand or earth, as shown in Figure 5 to 7, the positioning apparatus (1) is connected at lower portion of the lower tube (3) firstly. People can use foot to place on the flat plate (11) to force the lower tube (3) inserting into  
25    ground very conveniently. This positioning effect will be better than prior procedure, only by hands. Then, to push the handle (13) to make

the rod (14) apart from the aperture (31), the apparatus (1) can be moved upward to connect with both tubes of the shaft, as shown in Figure 8, for normal use of the beach umbrella.

Accordingly, the above-mentioned structure is only an exemplary  
5 of the present invention. Any modification with the same merit is still claimed in this application, such as using another structure of spring and positioning apparatus for connecting the tubes of the shaft of the beach umbrella that has similar effect to the present invention.